# Tandem Tops Earlier Record

A major improvement of the Brookhaven Tandem Van de Graaff capabilities has just been completed, making ours the most powerful electrostatics accelerator facility in the world at present.

This development, which started about one year ago, consisted of the design and installation of a new ion source system in the injector Tandem and the upgrading of this accelerator with new acceleration tubes, improved column connections, new belt guide configurations, SF<sub>6</sub> insulating gas mixture, etc. The new ion source system more than triples the number of ion species available for three-stage acceleration and the upgraded injector, together with the earlier upgrading of the second Tandem, opens many possibilities for new and exciting experiments.

On Monday, September 13, three-stage beams were accelerated for the first time with this new system and several new energy records for electrostatic acceleration were established. The highest energy reached was a 255 MeV copper beam, to be compared to the previous record (also ours) of 200 MeV nickel beams. Other beams accelerated during these tests were 200 MeV  $^{32}\mathrm{S}$  and 95 MeV  $^{12}\mathrm{C}$ , the highest energies ever achieved by electrostatic acceleration for each of these ions.

These S and C beam energies are sufficient to overcome the uranium Coulomb barrier, and thus nuclear reaction experiments, with any conceivable target, become possible. The copper beam energies are high enough to perform such experiments with any target up to ten. This is also a considerable extension of the previous capabilities.

The electrostatic acceleration of light and heavy ions has several advantages over other methods of acceleration. Some of those advantages, which are of importance for the type of experiments performed with these machines, are extremely stable and easily variable energies, DC beams that can be tightly focussed, and a completely unmatched variety of easily selectable ion species. Other important features are simple operation with a minimum of personnel and relatively low power consumption.

The continuous support, interest, and encouragement received from the former Physics Department Chairman, Joseph Weneser, from the present Chairman, Nicholas Samios, and from ERDA's Division of Physical Research made this devel-



In front of the Tandem machine that reached record energies this week are the principals involved in that success. From left are Mike McKeown, Ted Robinson, Peter Thieberger, Mario Manni and George Schwender.

opment possible. The whole Tandem Operations and Development Group, with Peter Thieberger as Group Leader, worked very hard and enthusiastically on this project. They received invaluable help from the User Support Group and from the Machine Shops. Special mention should be made of Mike McKeown, who had the direct responsibility for the ion source system developed and who originated and implemented many of the concepts that have now proven to be so successful; Ted Robinson, whose ideas, computer expertise, enthusiasm, and hard work were invaluable; George Schwender, who had the difficult and important task of implementing the design of highly reliable electron systems to operate under adverse conditions in a very limited space; and Mario Manni, whose

contribution in the form of expert mechanical design and Shop supervision was also invaluable. Chuck Carlson was mainly responsible for the supervision and execution of the tube, column, and belt upgrading and he received help and support from the entire operator crew under the supervision of Bob Lindgren, who, as always, contributed many important ideas and good suggestions.

With the recent improvements of our facility we can look forward to continued leadership in providing high energy ion beams for use by Brookhaven scientists and by outside users. Plans now under consideration for major new facility developments should enable Brookhaven to continue playing this important role in the future.

# **A Chemistry First**

The First International Symposium on Radiopharmaceutical Chemistry will get underway at Brookhaven next week. Approximately 200 scientists will attend the sessions, September 21-24, which will focus on the research in chemistry and biochemistry necessary for providing a sound basis for future developments in utilizing radioactive and stable tracers in the medical field

According to Alfred P. Wolf, Chemistry Department, who is chairman of the symposium, "the emphasis in this first meeting will be on chemistry, ranging from basic problems in nuclide production to problems in analytical control presented by nuclides of different half life and decay properties."

An interest in bringing together scientists involved in the basic research aspect of radionuclides and labelled compounds led first to the formation of the International Founding Committee about a year ago. The Committee, consisting of ten prominent scientists from various research institutions around the world, then developed the arrangements for this first meeting.

The banquet address on Tuesday evening will be given by The Honorable John B. Anderson, Congressman from Illinois. Mr. Anderson, Chairman of the House Republican Conference, is a Member of the Rules Committee and is ranking Republican Member of the Joint Committee on Atomic Energy. His subcommittees include ERDA – Nuclear Energy, Nuclear Regulations, Environmental Safety, Legislation, and Agreements for Cooperation.

Dr. William Myers, University Hospital, Columbus, Ohio, will be the keynote speaker on Wednesday evening.

Brookhaven speakers include Vito Casella, Joanna Fowler, Richard Lambrecht, Chemistry Department; and Louis Stang and Suresh Srivastava, Department of Applied Science.



Congressman John B. Anderson

The extensive program will include morning and afternoon sessions on Tuesday, Wednesday and Thursday, an evening session on Thursday and a Friday morning session. All the meetings will be held in Berkner Hall.

**Official & Special Events** 

First International Symposium of Radio-

Workshop on Environmental Effects of

Long Island Communicators Association

SUNY at Stony Brook Graduate Physics

pharmaceutical Chemistry (21-24)

Tuesday, September 21

Monday, September 27

Tuesday, September 28

Wednesday, September 29

Thursday, September 30

Student Tour

Meeting

Synthetic Fuels (27-29)

BNL Lecture - Berkner Hall

# **BNL Team Starts Testing Of Ocean Cask**

On Monday, scientists got a look at an 80-gallon container of nuclear wastes that had been reposing in the briny deep for the last 20 years. There was general agreement that, as far as the eye could tell, the 17 gauge steel container seemed remarkably well preserved. There was some encrustation of clay and some corrosion, but overall, it still had a sturdy appearance.

The drum had been retrieved from a depth of 9,800 feet in the Atlantic Ocean at the request of the Environmental and Protection Agency (EPA) and brought to Brookhaven on August 6, for analysis and testing. EPA is trying to determine the feasibility of a program to permit controlled ocean dumping of wastes. For this purpose, it has authorized the study of some containers of nuclear wastes deposited in the ocean during the 1940's and '50's. Ocean dumping was discontinued in 1962.

The drum has been maintained under argon gas atmosphere from the time it was brought aboard ship until the testing began in the Hot Cell of the Process Technology Division (HIRDL). This removed oxygen and prevented further corrosion. The package actually consists of three containers. As soon as it was brought out of the sea, the cask was placed in a heavy gauge steel container of the kind used to ship jet engines, and brought to the Laboratory. On Monday when technicians unbolted this container, the 17 gauge steel cask, still in good

shape, was revealed. The cask, in turn, is filled with concrete in which another container enclosing some of the wastes is embedded.

In order to determine the location and size of this third container, radiographs were taken. Pinpointing this container is important, because a crucial step in the



Walt Becker (left) and Peter Colombo examine a radiograph of a section of the cask.

process is to bore into the concrete and remove a sample, and no one wishes to inadvertently bore into the container. After testing the concrete sample for radioactivity levels and durability, the concrete will be broken apart and the container removed intact. Its contents, expected to be cobalt<sup>60</sup> and resins, will then be analyzed.

According to Peter Colombo, group leader of the Radioactive Waste Research program, the radiographs have located a cylinder approximately 45" long, with a diameter of 6", flanged with bolts on one end and welded on the other. Although some members of the team have been practicing coring on a dummy container "so that we won't be going in blind when we tackle the real thing," the real coring won't take place for another couple of weeks.

Right now various areas of the container are being photographed prior to samples being taken for testing by the metallurgists.

At the time of disposal, markings giving information about the cask were inscribed in concrete at one end. Apparently, this particular container consists of wastes from research work done at the Edgewood Arsenal in Maryland. Before proceeding further, Colombo says that meetings will be held with the EPA and the Army.

One marking at the end of the cask reads MR/HR/S-40 which, according to Bob Neilson, a member of the DAS team doing (Continued on page 2)

What Is It This Year?

Keep November 7 open for another BERA very Special Event!

September 17, 1976 Brookhaven Bulletin



The cask containing nuclear wastes, as it appears after 20 years immersion in the Atlantic Ocean, is looked over by health physicist Al Lukas (left), Ed Divis and Bill Vogel of the Radioactive Waste Research program.

#### Ocean Cask

(Continued)

the analyses, probably means 40 millirems per hour at the surface. Present readings of the cask now measure one to three millirems per hour at the surface.

This is the first time that one of these containers has been examined since they were "deep-sixed" many years ago, but it may not be the only one to be examined. According to Colombo it is quite possible that EPA will request the retrieval of other ocean casks for testing and analysis. If so, the original recovery team will be ready to go into action again. Besides Colombo, that unit includes health physicist Al Lukas, Walt Becker who gave expert technical assistance and Don Huszagh who made sure they had all the right equipment.

But for the present there is still a great deal of information to be gathered and a full report on this particular project is not expected to be available for another six

# **English Course Offered**

A course entitled "English as a Second Language" is being offered at the Laboratory this fall to employees and guests and their immediate families. The program is designed for adults who wish instruction in speaking, reading or writing the English language. Persons who are entirely unfamiliar with English, as well as those who wish to improve their skills in a particular area, can be accommodated.

Classes will be held from 7 to 9 p.m. each Thursday evening for ten weeks, beginning October 14, in the Meeting Room of the Staff Services Building, 2 Center Street. The cost of the course, which is being presented through the Middle Island School Adult Education Program, will be \$16 per person. A minimum of 15 students is required.

The registration form below should be completed and mailed with payment by October 1.

Mail no later than October 1 to: English Course, Personnel Office, Building 185. Checks should be made out to Middle Island Central Schools.

Name		 	 •••••
	Employee	Immediate Family	Guest
Address	······································	 	 
Telephone No	<b>).</b>		

#### **All Softball Participants**

This is just a reminder that our softball night to end a successful season is planned for Wednesday, September 22, at 5:00 p.m. at the Recreation Field. Rain date - September 23. There will be hot dogs, beer, soda and snacks for all.

### Retiree



Charles LoRe has been a Master Welder in Central Shops since November 8, 1962. He retired from the Laboratory on September 13, 1976.

-photo by Rosen

#### Arrivals & Departures

#### Arrivals

(ALI	ivais
Jacques C. Antoine	Applied Science
Seymour Aronson	Applied Science
Inder P. Bhasin	Applied Science
Judith G. Bonaduce	Applied Science
Robert T. Drew	Medical
Joanne M. Ferrante	Applied Science
Sonja B. Haber	Medical
Rowland F. Hautsch	Applied Science
Lance K. Heiko	Applied Science
Ann B. Herriott	Applied Science
	Accelerator
James L. Ivett	Medical
Stephen A. Kahn	Physics
John P. Keane	Applied Science
Martin W. Kendig	Applied Science
	Applied Science
Nancy Kublin	Physics
Dalia T. Kudirka	Biology
Janice A. Lamb	Director's Office
	.Adm. Sys. & Data Proc.
Joseph D. Moore	Applied Math.
	Applied Science
Richard S. Sapienza	Applied Science
	Applied Science
Doreen A. Schneider.	Applied Science
Jeffrey A. Tarvin	Physics
Huong C. Wong Mac.	Staff Services
Christopher M. Wurm	Applied Science
_	

#### Departures

Departu	103
Harold E. Bronheim	Applied Science
Roger A. Cowley	
Robert M. Garron	Medical
John H. Holder	Medical
Frederick J. Hollander	
Konrad P. Kotrady	
Charles Lo Re	
Serban D. Protopopescu	Physics
Philip S. TaylorAd	

# **Beyond The Naked Eye**

Someone gave John Kelsch a brass Bausch and Lomb microscope when he was 11 years old, and finding out what can be done with these instruments has been his principal interest ever since. Kelsch, who is in charge of the Microscopy Laboratory in the Instrumentation Division, will talk on the subject in the 139th BNL Lecture on Wednesday, September 29, at 8 p.m. in Berkner Hall. This lecture will be a departure from the regular lectures in this series, as it will not be technical, but will be geared to young people from about the age of ten on up, their parents, and anyone else who might be interested.

Kelsch will not deal with the history of microscopy, but will discuss the present state of affairs in the field and, in particular, magnification as it is used in Brookhaven's varied research. He will demonstrate what magnification is, why we use it, what information it gives to the researchers and why we select one instrument instead of another.

His lecture, which will be illustrated with over 25 slides, will also cover the kinds of microscopes available in his laboratory for example, the scanning electron and the transmitting electron microscopes, and two kinds of conventional microscopes. He will describe the preparation of specimens which come from many areas of research biological, medical, metallurgical, engineering, solid state physics. Kelsch will also conduct a brief guessing game to see whether anyone can identify objects that have been highly magnified.

He will take questions from the floor during the course of his talk, rather than group them all at the end, and will be glad to discuss his subject further with members of the audience after the lecture. Students will not get home late as Kelsch does not expect the talk to be much over an hour.

Although he majored in geology and biology, most of Kelsch's professional ca-



Scanning electron micrograph of a skeletonema (marine diaton) which comes from the New York Bight.

reer has been as a microscopist. In 1944, during his work at Interchemical Corp. in New York City, he used the fourth electron microscope then produced in the Western Hemisphere. He came to Brookhaven in 1959 and worked first in Nuclear Engineering (now DAS) until 1967, when he transferred to Instrumentation. Through microscopy he has been involved in the fields of cancer research, metal corrosion, pre-Colombian pottery, pigments, viruses, bacteriophage, decomposition of explosive crystals and clogged well points - to name

A buffet supper will be served in the Brookhaven Center before the lecture beginning at 6:30 p.m. Reservations should be made in advance by calling Ext. 3541 before 5 p.m. Refreshments will be available in the lobby of Berkner Hall immediately after the lecture.



- photo by Rosen

## Attention! **Cyclists and Runners**

The BNL fall cyclists and runners races will be held on the same day, October 3, 1976.

The runners will start their races (5, 10 and 20 km) at 10 a.m. with registration starting at 9 a.m.

The cyclists will start at 11 a.m. with registration starting at 10 a.m.

All races are open to BNL employees, families and guests. Registration fee will be

Information on the run may be obtained from Gus Prince, Ext. 2901 and for the cycle race from Gerry Morgan, Ext. 4841.

# **Answers To** What Did He Say? Sept. 17

- 1. The spirit is willing but the flesh is
- 2. Pride goeth before a fall.
- 3. The grass is always greener in the other fellow's yard.
- 4. A rolling stone gathers no moss.

#### **New York City Train Trip**

The Hospitality Committee is planning a group railroad trip to the city, Wednesday, October 6. Departure will be at 8:32 a.m. from the Patchogue LIRR station. Round-trip fare for adults is \$2.45, children under 6 years ride free. Reserve a ticket by sending your fare through the U.S. mail to P.O. Box 322, Upton, New York, no later than September 29. Make checks payable to "Cash." Refunds will be made only if cancellations are received before noon on October 1.

For those who are interested in joining them the group has arranged a tour of the United Nations. The cost is \$2 for adults: \$1 for school children, grades 1 through 9; and \$1.50 for high school and college students. Children under 5 cannot be admitted to the U.N. If there is a General Assembly on that day the tour group will be admitted; however, children under age 12 will not be admitted to the Assembly Hall. The tour will begin at about 10:45 a.m. and if there is a General Assembly end at about 1 p.m. You may make reservations for the U.N. tour at the same time you arrange for the train ride, in the same manner.

#### Coming

Last of the Red Hot Lovers October 15, 16, 22, 23

September 17, 1976 Brookhaven Bulletin

# 🔵 BROOKHAVEN BULLETIN 🚍

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BERNICE PETERSEN, Editor Doug Humphrey, Photo-Journalist CAROL PETRAITIS, Copy Preparation

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CARL R. THIEN, Public Relations Officer

#### Letters To The Editor

To the Editor:

I and my children, Manju and Sheela, wish to express our sincere thanks to all our friends for their help and support following the tragic death of my wife Girija.

G. Chikkappa

## Cafeteria Menu Week Ending Sept. 24, 1976

1.10
1.05
1.05
1.30
1.05
1.00

1.00
1.10
1.00
1.30

#### **Diners Note**

The Cafeteria will be closed on Saturday and Sunday, September 18 and 19.

The Center Club will have a snack bar open from 9:00 a.m. to 2:00 p.m. on these

The Vending Food Service in Building 912 will be in operation continuously.

Normal business will resume at the Cafeteria on Monday, September 20.

#### **Town Tennis Tournament**

Anyone interested in entering the Brookhaven Town Tennis Tournament may pick up an entry form at the BERA Sales & Services Office.

## **Pool/Gym Weekend Closing**

In order to do a complete and thorough exterminating job in the Pool and Gymnasium, the complex will be closed during the weekend of October 2 and 3.

It is absolutely necessary that locker users remove all contents from their lockers and leave the doors open. Any lockers not left in this condition will result in the locks being cut off and the contents placed in a holding bin for pickup the following

#### Soccer

John Skalyo

The Eastport/Moriches team won the Brookhaven Town Summer Soccer League and eventually won the Suffolk County Championship. During the season, BNL lost 1-0 to the champs in a hard fought contest. Alas, BNL was on the short end of the score by one goal many times this past season. The addition to the team of a goalgetter/striker/torjaeger is highly desirable.

The team plays a pick-up game every Monday night starting at 5:30. All interested people need only show up for a good workout. It's a good preparation for the indoor league starting later in the year.

## **Met Opera Tickets**

Tickets for the 1976-77 Metropolitan Opera season will go on sale at the BERA Sales & Services Office in the Cafeteria, on Tuesday, September 21, starting at 7:30

- 1. No orders will be taken before September 21.
- 2. An employee may purchase as many pairs of tickets as desired.
- 3. All sales are final. No tickets will be returned or accepted for refunds or ex-
- 4. Seats are located in the Family Circle and are priced at \$7.00 each, including
- 5. Lists of seat numbers for each performance are available at the BERA Sales & Services Office.

#### Schedule

October		
Tues.	12	Aida
Tues.	19	Il Trittico
Wed.	20	Le Nozze di Figaro
Thurs.	21	Il Trovatore
Mon.	25	Aida
Tues.	26	Le Nozze di Figaro
Thurs.	28	Il Trittico
November	r	
Tues.	2	Le Nozze di Figaro
Wed.	3	Die Meistersinger*
Fri.	5	Il Trovatore
Tues.	9	Il Trovatore
Thurs.	11	Die Meistersinger*
Mon.	15	Die Meistersinger*
Thurs.	18	Aida
Sat.	20	Lohengrin
Tues.	23	Lohengrin
$\mathbf{Wed}$ .	24	Esclarmonde
Thurs.	25	Aida
Fri.	26	Lohengrin
Tues.	30	Lohengrin
December	•	
Thurs.	2	La Forza del Destino
Sat.	4	Esclarmonde
Mon.	6	Faust
Wed.	8	Aida
Fri.	10	Faust
Tues.	14	Esclarmonde
Thurs.	16	Die Zauberflöte
Tues.	21	Tosca
Thurs.	23	Die Zauberflöte
Sat.	25	Tosca
Thurs.	30	Faust
January		
Tues.	4	Salome
Wed.	5	Die Zauberflöte

Tues.	4	Salor
Wed.	5	Die 2
Fri.	7	Tosca

11 Lucia di Lammermoor Tues. Tosca Wed. 12 Thurs. 13 Faust 15 Lucia di Lammermoor Sat. Thurs. 20 Salome

Mon. 24 Die Zauberflöte Tues. 25 Sat.

Lucia di Lammermoor

rebruary		
Tues.	1	Le Prophete
Wed.	2	Salome
Thurs.	3	Die Walküre
Fri.	4	Lucia di Lammermoo
Tues.	8	Die Walküre
Wed.	9	Le Prophete
Thurs.	17	Le Prophete
Fri.	18	Salome
Tues.	22	Carmelites
Thurs.	24	Die Walküre
Fri.	25	La Forza del Destino
Sat.	26	La Nozze di Figaro
March		
Tues.	1	La Forza del Destino
Sat.	5	La Forza del Destino
Mon.	7	Le Prophete

Tues.	1	La rorza dei Destii
Sat.	5	La Forza del Destin
Mon.	7	Le Prophete
Tues.	8	La Forza del Destin
Thurs.	10	Le Nozze di Figaro
Tues.	15	La Boheme
Thurs.	17	Tosca
Wed.	23	La Boheme
Tues.	29	Andrea Chenier
Thurs.	31	Il Trovatore
April		
Tues.	5	Lulu
Fri.	8	La Boheme
Tues.	12	La Boheme
Wed.	13	Samson et Dalila
Thurs.	14	Lohengrin
Sat.	16	Lulu

\*Curtain time for all evening performances of Die Meistersinger has been changed to 7:00 p.m.

#### **IBEW Meeting**

Local 2230, I.B.E.W. will hold its regular monthly meeting on September 23, 1976, at 8:00 p.m. in the Knights of Columbus Hall, Railroad Ave., Patchogue. There will also be an afternoon meeting at 2:00 p.m. for shift workers in the Union Office at 31 Oak Street, Patchogue. On the agenda will be regular business, committee reports and the President's report.

#### Sight Savers



If they had not been wearing their safety glasses, electrician Dave Johnstone (right), and foreman Ed Iberger (left) would be in deep trouble today. Johnstone was making an electrical connection when there was a flash and metal splattered on his glasses, as well as on Iberger, who was standing right behind him. Lou Jacobson, Safety Coordinator for Plant Engineering, presented them with Wise Owl certificates, awards sponsored by the National Society for the Prevention of Blindness, -photo by Rosen

#### Softball

Ed Taylor

#### League I

Ravens 5 (5-3) - Old Timers 3 (3-5)

The Ravens, led by the timely hitting of Mike Losquadro, Wayne Smith and Ed Taylor and the cultch pitching of veteran Spider Ligon, clinched the League I Championship by defeating a good Old Timer team 5 to 3. Congratulations to the Ravens on a nice season.

#### Blue Jays 7 (4-4) - Hawks 3 (4-4)

#### League II

The Six Pax defeated the Dirty Sox in their second half playoff game last week to win both halves and the League II championship. The Six Pax played well as a team, with Ken Asselta of the Pax making some superb catches in the outfield.

#### League IV

#### Streakers 12 - Power Packers 7

In this first half championship playoff game last week, the Streakers combined good defense with good hitting to defeat the Power Packers, thus winning both halves and the League IV championship. Tony Krupien had a home run for the

#### **Nuke Powers 11 (2-6)** Charlie Browns 5 (3-5)

The Nuke Powers, with a solid defensive effort and strong pitching from Paul Haas and George Greene, held the Charlie Browns scoreless in 4 innings. The hitting, led by Weaver, Greene, Guppy, Vargo and Ginsberg, gave the Nukes' their best game of the season. They look forward to a much improved season next year.

#### League V

Final 2 games were cancelled.

#### 1976 Softball Standings 1st Half 2nd Half Overall

League I	1st Half	2nd Half	Overall
*Ravens	5-2	5-3	10-5
Hawks	3-4	4-4	7-8
Old Timers	4-3	3-5	7-8
Blue Jays	2-5	4-4	6-9
League II			
*Six Pax	6-1	5-3	11-4
Dirty Sox	3-4	5-3	8-7
Bubble Boys	3-4	4-4	7-8
Metallurgy	2-5	2-6	4-11
League III			
*Circuits	7-0	7-1	14-1
Phoubars	3-4	4-4	7-8
Sweathogs	2-5	3-5	5-10
Medical	2-5	2-6	4-11
League IV			
*Streakers	5-2	6-1	11-3
Power Packers	5-2	4-3	9-5
Charlie Browns	3-4	3-5	6-9
Nuke Powers	1-6	2-6	3-12
League V			
*Oh Kays	7-0	6-0	13-0
Diamonds	5-2	3-3	8-5
Balls & Strikes	5-2	2-4	7-6
Turkeys	3-4	3-3	6-7
Odd 15	1-6	3-3	4-9
T.N.T.	0-7	1-5	1-12

\*Denotes league champions.

# **Bicycle Club Meeting**

A meeting will be held Monday, September 20, at 4:00 p.m. in the seminar room (2nd floor) of Bldg. 480. The purpose is to enlist the assistance of more people in running the coming fall race and next season's tours, and to discuss the advisability of a formal bicycle club. If you are unable to attend, but would like to help out, notify G. Morgan, Bldg. 815, giving address and phone number, and indicate a preferred meeting time during the week.

Bicyclers are notoriously individualistic, but a little mutual assistance can give returns well worth the effort.

#### BERA Rifle/Pistol Club

The BERA Pistol Club has joined in with the Eastern Long Island Pistol Club. All those interested please send your name, Lab extension and home telephone number to John Zahra, Building 911A, or call Mr. Zahra on Ext. 4634 or 4667.

#### Classified Advertisements

#### **Placement Notices**

Each week the Personnel Office lists personnel placement requisitions, currently being processed. The purpose of these listings is, first, to give notice of all non-scientific staff positions being filled and, second, to give employees an opportunity to request consideration for themselves through the Personnel Office. In filling vacancies, the Laboratory's objective is to give first consideration to present employees, as follows: employees within the immediate group having the vacancy, employees within the department or division, employees within the Laboratory as a

For further information regarding a placement notice, or to request consideration for an available position, contact Supervisor, Personnel Placement & Development, ex-

203. BUILDING & GROUNDS UTILITY WORKER -Performs a wide variety of tasks common to maintenance and construction trades on buildings, roads and grounds.

Uses various specialized tools and equipment such as tractors, concrete mixers and fork lifts. Plant Engl neering Division.

204. SECRETARIES - AAS degree or equivalent in secretarial science and experience in general office procedures. Assignments involve providing secre-. tarial services to purchasing agents and assisting in other administrative tasks associated with the procurement function. Purchasing Division.

205. RESEARCH SERVICES ASSISTANT - Part-time position. AAS degree or equivalent in medical technology with experience in microbiology, virology and tissue culture. Department of Applied Science.

206. TECHNICIAN - AAS degree or equivalent in mechanical technology or chemistry. Assignment involves construction and operation of high temperature experimental apparatus, preparation and analysis of samples. Experience with vacuum systems, aasflow circuits, glass blowing and lab instrumentation required. Department of Applied Science.

207. SUPPLY & MATERIEL CLERK AND GENERAL CLERK - Assignments involve clerical duties requiring thorough familiarization with the operation of a phase of the central stores facility operation. Duties include typing, maintaining files, working with purchase orders and receiving reports and assisting in other inventory control operations. Supply & Materiel Division.

#### Classified Advertisements

#### **Autos & Auto Supplies**

74 BMW 2002 - Orange, 30,000 mi, excel cond, extras. W. Bottcher, 286-1649.

70 CHEVY IMPALA - V8, automatic, ps/pb, new tires, brakes, 4 dr, hdtp. Asking \$800. 473-7993, after 5. 72 CHEVY VEGA - 48,000 mi, 15,000 mi on new eng, good tires, body is poor. \$600. E. Norton, Ext. 4355. 73 CHEVY VEGA - Dark green, 2 dr sedan, r&h, new tires, low mi. \$1375. Ext. 2951, 475-0364.

73 TRIUMPH SPITFIRE 1500 - In very good cond, 4 brand new tires. \$1925, S. Hill, 666-6641.

73 JEEP - CJ5, 6 cyl, 32,000 mi, Warn hubs, gauges, rear seat, trailer hitch. 732-1298.

68 REBEL - Amer Motors, 6 cyl wagon, tires good & snows, needs exhaust work, runs, must be sold. \$200. Mario, Ext. 4396.

66 FAIRLANE- 6 cyl standard, excel cond in & out. \$500. 289-7383 anytime.

2 VW SNOW TIRES - 6 volt VW battery. C. Hobson, Ext. 3082, 727-1324 after 5:30.

MGA SPORTS CAR - Only good for parts. Asking \$200. 589-9103.

72 FORD LTD - 4 dr hdtp, ac/ps/pb, elec windows, good cond. Ext. 2972. 69 CAMARO - Auto, r&h, bucket seats, console, small

V8, excel cond. 588-4703. 73 MG MIDGET - New muffler, battery, tires, am/fm

8-track, good cond. Best offer over \$1500. Ext. 2874, 289-8459 or 475-4386. 73 FORD - Pinto Squire, 4 spd, 4 cyl, roof rack. \$1600

firm. 878-4567 after 6. 66 DODGE - Dart, 2 dr, good engine and tires. \$225.

Ralph, Ext. 4673. BUMPER - Step down, 72 Chevy pickup. Bob, 475-

71 PINTO - 51,000 mi, new tires & brakes, good cond. \$975 firm, 281-4240. 71 PINTO - 46,000 mi, new brakes, snows, good tires.

\$1000. 981-9041. USED WHITEWALLS - (3) 735-14, \$5 ea; (1) C78-14

mounted on Chevy wheel, \$20. 654-0810.

74 FIAT 128 - 2 dr, blue, 24,000 mi, excel cond. \$1800. Whisker, Ext. 3312.

73 PINTO WAGON - 4 spd, manual, 4 cyl. \$1600 firm. 878-4567 after 5:30.

74 DATSUN 260Z - 2 + 2, 31,000 mi, excel, ac, custom sky blue, wire wheel covers, am/fm stereo, 8 track. \$5850. Ext. 2540, 929-8283.

2 RIMS - 13" 5-hole, \$3; (2) 15" VW, 5-hole, \$5. Ext. 4719, 727-5912.

69 PONTIAC CATALINA - Station wagon, V8, 400 cc engine, ac/ps/disk brakes, power accessories, very good cond, will consider swap for smaller car. 473-4477.

66 OLDS F-85 - V8, ps, auto, 2 dr, high miles but mech excel, needs paint. \$200 or best offer. Ext. 2064, 722-3863

69 CADILLAC - Sedan de Ville. \$940. Ext. 3267, 473-

65 CHEVY - Engine reblt, new battery, engin & running gear in good order, ps/pb, auto trans. \$600.

69 FORD WAGON - 10 pass, 64,000 mi, very good mpg, good shape, ps/pb, new muffler system. \$975. Vin Chiampou, Ext. 4285, 281-8928.

75 PLYMOUTH VALIANT - 4 dr, 6 cyl, white, at/ps, am/fm, rear window def, 11,500 orig mi, \$2800. Tanaka, Ext. 3028.

65 VW SQUAREBACK - For parts, runs, eng needs work, 2 good new tires, new clutch, muffler. \$175. Curtiss, Ext. 4608.

70 RED ROVER - 3500S, all systems go. Asking \$1500. W. Hughes, 286-1725.

70 PONTIAC BONNEVILLE - Fully equipped incl power trunk, 18 mpg, excel cond. \$1200. Joan, Ext. 4393, 399-2084.

54 FORD - Glass top, body excel, \$1500. Joan, 399-2084 eves.

55 & 56 T BIRDS - Fully restored. \$4000 each. Joan,

75 FORD PICKUP - 8' bed, crew cab, auto trans, camper special, ac/ps/pb, 8-track stereo. J. Soler.

73 HONDA - Street & trail, 140 mi, excel cond. \$300. J. Soler, 588-0147.

75 TOYOTA - Corola, 20,000 mi, 2 dr, standard trans, am/fm stereo. Asking \$2500. 727-5324.

HURST - 4 spd shifter, competition plus, from a Camaro Z28, excel cond. \$15. M. Kinney, Ext. 4316, 924-3783.

#### **Boats & Marine Supplies**

26' NORWALK LAPSTRAKE - 110 hp Crown, Chrysler engine, fiberglassed top. \$1250. Said, Ext. 2902, 567-2185 after 6.

20 HP MOTOR - Mercury, long shaft, excel cond, low hours, 1973. \$450 firm. 286-3815. 17' GRADY WHITE - Tri hull, 69 100 hp Evinrude,

excel cond, extras, w/trailer. \$1900. 286-1793. 6 GAL TANK - Merc, in carton. \$20. Chas Horn, Ext.

BOAT TRAILER - 1500 cap Highlander, used, new winch & lights, bearing buddies, galvanized. \$225. 289-5248.

24' TYLERCRAFT - Twin keel, fiberglass sloop, sleeps 4, fully equipped, excel sailboat for family cruising.

24' COLUMBIA - 69 fiberglass, 75 6 hp eng, main, genoa & working jib, sleeps 4, marine head, sink, stove (alcohol), extras. \$5400. 732-5338 after 6.

15½′ MFG - 40 hp Evinrude, trailer, carpeted, extras, new vinyl seats, excel cond. 473-0178.

20' SPORTFISHERMAN - Custom Mako, 1974, twin 65 hp Mercs, power trim, full electronics, canvas & fishing gear. \$7900. Phil Warner, Ext. 4636.

14' SLOOP - Flying Jr, fiberglass, alum spars, main, spinnaker, trailer, fully equipped. \$975. Ext. 4597.

YARD SALE - Sept 17-18, 10 am-3:30 pm, 19 New Jersey Ave, Bellport, rain date Sept 24-25.

GARAGE SALE - Sept 16-19, 23 McConnell Ave, Bayport. Old glasses & bottles, household goods, toys, garden tools, antiques & many other items.

BOX SPRING - Queen size Sealy, excel cond, no reasonable offer refused. Ext. 3595, 751-2185 after 6. LUDWIG DRUMS - 4-piece w/Zildjan cymbals, \$225, stereo, \$100; 8x10 Coleman family tent, \$50; other misc items. Herb, Ext. 3403, 473-4759.

WURLITZER CONSOLE ORGAN - Full 61-note manuals, 25-note pedal board, 2 octave chimes, etc. List \$5200, perfect cond, \$3000. Phil, Ext. 4636.

DINING RM SET - Contemporary walnut, Keller, 60" table w/12" leaf, 4 chairs, 60" buffet, excel cond. \$300. Judy Ridgeway, Ext. 2062, 473-1154 eves.

LEICA LENSES - Screw mount, 35 mm Summaron, 50 mm Summitar, \$55 each/\$100 both. Frank, Ext. 2410, 281-7113 eves.

WOOD DOOR - 3-panel, 36"x80"x1¾", good cond w/hardware, yours for the asking. Perlman, 472-1174.

ELEC HEDGE TRIMMER - \$5; removable fender mount rear view mirror, \$5; electric fan, \$6. Ext. 2485.

10 GAL FISH TANK - \$5; elec sissors, used once. \$7. O. Booker, Ext. 4719, 727-5912.

ZENITH TV - 12" B&W, good cond, \$27; wonder lounge exerciser, like new, \$9, Tanaka, Ext. 3028. RCA AIR CONDITIONER - Whirlpool, 8000 btu, 3 yrs

old. 751-8158. YARD & GARAGE SALE - Group, Sept 18 & 19, N.

Halsey Manor Rd, Manorville, off Exit 70. 50 LBS POTATOES - \$2. Ext. 3696/3613, Izzy.

WINDOWS - 5 storm & screen, 31"x55", \$5 each. 475-1548 after 6.

22" RCA TV - B&W console, 2 speakers. Ext. 3392, 475-8330.

12" B&W TV - W/antenna, very good cond, \$45; stereo, like new, \$20; am/fm clock radio, \$15. Apt. 28D, Ext. 3011

WALL DESK - Bookcase combination, \$25. Ext. 2041. PUPPIES - Black labrador/shepherd mix, 4 females, 2 males, free. Charlie, Ext. 4758.

SEARS REFRIGERATOR - Coldspot, model 62, frostless, 16.6 cu ft, white, right-hand door, excel cond. \$125. 286-0384.

NIMROD CAMPER - 1973, sleeps 6, sink, stove, ice box, holding tank, canopy, excel cond. \$1200. Joanna, 399-1399.

CANON - T1 35 mm w/50 mm 1:1.8 lens, \$125. Cohn, 265-0501 after 6.

RIDING LAWN MOWER - 5 hp, 24" blade, recently overhauled. \$85. Cohn, 265-0501 after 6.

SLIDE TRAYS - Airequip, metal. 1.35 each/7.50 ½ doz. Irv Meyer, Ext. 3038.

DISHWASHER - Butcher block top, portable, convertible, used 11 months. \$200. Ext. 3128, 473-8566.

BUFFET - W/china top, solid walnut, oiled finish.

\$125, Ext. 3128, 473-8566.

\$900. 727-0082.

cond. \$750. 281-5498.

HI-RISER - Castro, w/brown cover & bolster, excel

cond. \$100. Ext. 3128, 473-8566. WURLITZER PIANO - Full keyboard, excel cond.

WHIPPET PUPS - Pure bred champion ancestry, fast,

able, beautiful, reasonable. 722-4660. SWIMMING POOL - Coleco 18', 4' deep, w/filter &

ladder, new liner. \$150. 281-5498. 68 COX CAMPER - New canvas, fully equipped, excel

FOR ADOPTION - Male pet rabbit, house broken.

TREES - White pines, up to 4', dig your own, Alberta

Spruces, up to 2', \$5, perfect. John, 744-5867. GITANE - Men's 10 spd bicycle, good cond, some extras. Asking \$150. John, 286-8724 after 5.

AEROSMITH - 5 tickets to Sept 23rd concert. \$7.50 each. 331-1765.

ROTOTILLER - Gravely, good cond. \$200. 924-8213.

VIOLIN - Bow & case, A-1 cond. \$60. 924-6348.

YARD SALE - Sat & Sun, Sept 18 & 19, 15 Rockhall La, Rocky Point, The Tides, children's coats, school clothes, collectables, material.

SCREEN HOUSE - Wenzel, 12x12, Forester cotton drill w/nylon screen walls. \$40. Tom, Ext. 2501.

BICYCLE - Banana seat, \$30. Ext. 3126, after 5.

ANNALS OF AMERICA - 19 vols, completely new set, Ext. 3126 after 5.

POLAROID CAMERA - Square shooter, w/distance finder & focused flash, instruction booklet, new cond.

OLYMPIC STEREO - Console, record player, 4-track deck w/cover and case, 3 spd, good cond. \$40. Ken, Ext. 4581, 4003.

BABY ITEMS - Pak-a-poose carrier, \$5; twin stroller converts to carriage, \$30. Ext. 3828, 751-7250.

TAPE RECORDER - Tandberg model 64 stereo, 4 track deck w/cover & case, as new cond. \$300. Ext. 3828,

CARPETS - (1) purple, 12'x18', \$20; red, 12'x12', \$25. Ext. 2874, 289-8459.

76 GMC VAN - Conversion, under 2000 mi, selfcontained, sleeps 4. Ext. 3143, 325-1961.

DISHWASHER - Kitchen Aid, top loading, portable. \$60. Colin, Ext. 4154.

CB LOCKING SLIDE MOUNTS - AI Campbell, Ext. 3354.

FURNITURE - Colonial sofa, winged back, love seat, rocker, gold print, good cond. \$150. 286-3791. WASHER/DRYER COMBO - 1 yr old, 110 volt, must

SHOT GUN - Winchester model 70, 30-06 cal; Winchester model 70, .243 cal, varmint barrel, both excel.

34' COPPER PIPE - 11/4" type M, used. \$15. Frank, Ext. 4581.

#### Real Estate

\$125 each. Frank, Ext. 4581.

Real Estate advertised for sale or rent is available without regard for the race, color, creed or national origin of the applicant.

WADING RIVER - 4 br colonial, den w/fp, garage, carpeting, landscaped, ¾ treed acre, deeded beach rights. Sacrifice, \$50,000. 929-8129.

ROCKY POINT - Rent or sale. Herb, Ext. 3403, 477-4757.

MT SINAL- Rent or rent w/option. Herb, Ext. 3403, 473-4757.

MOBILE HOME - 12'x50', 2 br, fully carpeted, awning, skirting, extras, excel cond, Peconic River Park. Ext. 4550, 727-1464 after 6.

PATCHOGUE VILLAGE - 3 br ranch, expansion attic, finished basement, most appliances, country kit, attached garage, exterior maintenance free. \$34,000. Ext. 2290, 475-7694.

HOLBROOK - 2 br condominium, 2 levels, 11/2 bath, all appliances, w/w carpeting, extras. Low 30's. Ext. 3254. SOUND BEACH - 3 br, 1 bath, oil-hot water, 1/3 acre

landscaped, 19 min walk to prvt beach. Low 30's. Ext. 3766, 286-0123 eves. MASTIC - 3 br ranch, near Lab, carpeting, appliances, 100'x150' fenced yard, full basement. \$29,000. Ext.

2042, 399-0374 after 5:30 and weekends. WADING RIVER - For sale or rent, 3 br, wooded ½ acre, fp, 2-car garage, prvt beach, full basement.

\$38,500 or \$300/mo. Ext. 3535, 929-6940.

SETAUKET - 3 br ranch, 2½ baths, all appliances, pool, playrm, separate entrance to finished basement, possible home office. Reduced to mid \$50's. 751-7363.

POCONOS - 1 acre, water, elec, horseback riding, skiing, tennis, priv community, gate guard, will hold mortgage. Ext. 3870, 723-3003.

#### For Rent

BELLPORT - South of S. Country Rd, 2 bedrm house, furn or unfurn. \$235/mo + util. 286-1725.

ROCKY POINT - 4 br house, 2 baths, fp, newly decorated, prvt beach rights, perfect for 4 singles. 887-4144 days, 212-896-8763 eves.

PUERTO RICO - Shorefront penthouse, 1 hr from San Juan, sleeps 6, 2 bedrm, 2 baths, fully equipped, take advantage of off-season rates. Ext. 3482.

BROOKHAVEN HAMLET - Apt in older country home, lg Ir, kitchenette, br, bath, furnished, util incl, working mature adults preferred. 286-0129.

VERMONT - Fully equipped chalet w/stone fp, fall foliage, Stratton Art Festival, tennis, gold, hiking, canoeing, minutes to Bromley, Stratton, X-country skiing, skating on property. 757-5599.

MILLER PLACE - Furnished 3 br house, 2 baths, fp, all appliances, wooded acre, screened porch, garage, no pets, couple preferred. Oct/Nov '76 thru July '77. \$350/mo + util. Ext. 3821, 473-6624.

MASTIC BEACH - 2-floor, 2 br, 11/2 bath, Ir, dr, kit, French doors onto patio, 2 acres. \$250/mo + util. 281-5535 weekdays, 281-6551 weekends.

S JAMESPORT - 3 bedrm house, kitchen, living rm, dining, bath, near beach, couples preferred, no pets. \$195/mo + util. Ext. 2907, 698-0576.

WADING RIVER - 21/2 rm furn apt, beautifully decorated, w/w carpeting, priv entrance, util incl, gentlemen preferred, 929-4885,

#### Wanted

BABY WALKER - Ext. 3859, 924-8507.

FILE CABINET - W/4 drawers. Mary, 286-1440 eves.

BABY SCALE - Mary, 286-1440, eves.

PRINT - Andrew Wyath's "Hayledge", unframed. S.N. Earle, Ext. 3320. ROOF ANTENNA - Evaluation/repair of existing,

advice on possible replacement. 286-3742 eves & REFRIGERATOR - 2, 4 or 6 cu ft, good cond. Juliet,

Ext. 3640, 732-0456 eves. TRUMPET/CORONET - Used, for child. 475-2998.

DESK - Student's wood desk, no more than 38" long. 475-2998.

MICROSCOPE - Working model suitable for 12 yr old, reasonable or rent yours for 3 mos. Bill Sanchez, Ext. 3354, 732-5197.

TABLE - Very large for dining & 8 chairs, reasonable, cond unimportant except for sturdiness. 751-8590. USED SCANNER & VHF - Crystals. Al Campbell, Ext. 3354.

LOST - Wallet, on Mon, Aug 31, left in bank, reward

#### for return of contents. W/any info call Louis Morris, Ext. 3084.

Lost & Found

Car Pools PORT JEFF - Ride needed, to Lab weekdays, a.m., will share gas \$. Gary, Ext. 2093, 928-2008.

TUTORING - In my home, expert in math, French, German. \$10/hr. 941-4328.

TREE SERVICE - Cord wood, lawn leaves vacuumed, clean ups, light hauling. 727-1329. REPAIRS - Auto, truck, motorcycle, done at your home

or ours. Glenn, 281-7873. RECORDING - 8-track tapes professionally recorded to your order by disco-lectra, 45 min. \$3 ea. Rip. Bowman, Ext. 4672.

BLACKTOP - Paving & sealing. Bob, 475-4382.

PAINTING - Exterior & interior, reasonable rates, free estimates. Tom, 588-0072, 981-9690.

HOUSING CLEANER - Hard worker, references avail, weekly or bi-weekly job preferred. 928-5610 after 6. DRYWELLS - New line installed, reasonable. Mike,

CHILD CARE - In my home, Pt Jeff. 331-1765.

289-5704 after 5.

held for publication in the next issue

are to be repeated.

TUNE-UPS - Brake jobs, done on your driveway. Ray, 231-7158 after 5.

HONEY EXTRACTOR - For rent, 2-frame, overnight or weekend, price open. Herb, Ext. 2488, noon.

Ads should be restricted to 20 words or less and typed or printed on the form provided, and must bear the employees

Life No. Ext. .....

#### **Classified Ad Policy**

#### Deadline is 12 noon Monday for publication Friday of the same week. 1. The Brookhaven Bulletin's classified section may be used 5. Ads not carried because of space restrictions will be

- only by active and retired Laboratory employees.

  2. All items for sale or rent must be the advertiser's
- property.

  3. Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
- 4. Firearms offered for sale or trade may not be brought on site.

For Sale: Auto & Auto Supplies

For Sale: Miscellaneous

For Sale: Boats & Marine Supplies

Wanted
Carpools
Lost & Fa Lost & Found

Check x the heading applying to your ad. Print or type your ad in 20 words or less.

Ads concerning property for sale or rent cannot be accepted on this form. Special Real Estate Ad forms are available at the Office of the Brookhaven Bulletin, Room 111, 40 Brookhaven Avenue

(Name & Phone No. To Call)

Send to: Brookhaven Bulletin, Building 460, 40 Brookhaven Avenue (Ext. 2345).